

Serial No.: 09/961,338
Art Unit: 3747
Examiner: HARRIS, Katrina B.
Page 2 of 31



IN THE CLAIMS:

Please replace the claims as follows (the status in accordance with the changes being made on this Amendment being presented below):

1. **(Previously Presented)** A modular family of internal combustion engines, wherein:

the family includes at least three engines, each with a different configuration selected from a group comprising single cylinder, V-type, inline, opposed, square, w-type and radial; and

each of the engines includes at least one cylinder, each cylinder of each engine of the family using identical top end component packages, and

two of at least three engines, with different configurations, are each constructed and arranged to power a different recreational vehicle selected from a group comprising snowmobiles, all terrain vehicles, go carts, personal watercraft, boats with outboard motors, boats with inboard engines, motorcycles, scooters, and light aircraft;

a first engine of the at least three engines having a configuration of one of a single cylinder, V-type, W-type, opposed, and radial cylinder configuration;

a second engine of the at least three engines having a configuration of one of an inline and a square cylinder configuration.

2. **(Original)** A modular family of internal combustion engines as in claim 1, wherein the engines are all overhead valve, four-stroke engines and the top end component package comprises:

Serial No.: 09/961,338
Art Unit: 3747
Examiner: HARRIS, Katrina B.
Page 3 of 31

at least one exhaust valve, valve seat, valve guide, valve stem seal, valve spring, valve spring retainer and exhaust valve rocker arm; and

at least one intake valve, valve seat, valve guide, valve stem seal, valve spring, valve spring retainer and intake valve rocker arm.

3. (Original) A modular family of internal combustion engines as in claim 2, wherein the top end component package further comprises:

a piston pin;

a small end rod bearing;

a big end rod bearing;

a set of piston rings;

a pair of connecting rod bolts;

a cam chain tensioner;

an exhaust valve hydraulic tappet for each exhaust valve; and

an intake valve hydraulic tappet for each intake valve.

4. (Original) A modular family of internal combustion engines as in claim 3, wherein the top end component package further comprises:

a piston; and

a connecting rod.

Serial No.: 09/961,338
Art Unit: 3747
Examiner: HARRIS, Katrina B.
Page 4 of 31

5. **(Original)** A modular family of internal combustion engines as in claim 4, wherein the top end component package further comprises:

 a cylinder head; and

 a camshaft.

6. **(Original)** A modular family of combustion engines as in claim 5, wherein the top end component package further comprises:

 at least one rocker arm shaft.

7. **(Previously Presented)** A modular family of internal combustion engines as in claim 1, wherein the first engine has a cylinder configuration of one of a single cylinder and a V-twin, and wherein the second engine has a cylinder configuration of one of an inline twin and an inline three.

8. **(Previously Presented)** A modular family of internal combustion engines as in claim 1, wherein the first engine has a cylinder configuration of one of a V-six and a V-four and wherein the second engine has an inline four cylinder configuration.

9. **(Previously Presented)** An engine from a modular family of internal combustion engines, comprising:

 at least one cylinder; and

Serial No.: 09/961,338
Art Unit: 3747
Examiner: HARRIS, Katrina B.
Page 5 of 31

a top end component package associated with the at least one cylinder;

wherein the family includes at least three engines, each with a different configuration selected from a group comprising single cylinder, V-type, inline, opposed, square, w-type and radial;

a first engine of the at least three engines having a configuration of one of a single cylinder, V-type, W-type, opposed and radial cylinder configuration;

a second engine of the at least three engines having a configuration of one of an inline and a square cylinder configuration;

wherein each cylinder of each engine of the family uses identical top end component packages; and

wherein two of the at least three engines, with different configurations, are each constructed and arranged to power a different recreational vehicle selected from a group comprising snowmobiles, all terrain vehicles, go carts, personal watercraft, boats with outboard motors, boats with inboard engines, motorcycles, scooters, and light aircraft.

10. (Original) An engine from a modular family of internal combustion engines as in claim 9, wherein all of the engines of the family are overhead valve, four-stroke engines and the top end component package comprises:

at least one exhaust valve, valve seat, valve guide, valve stem seal, valve spring, valve spring retainer and exhaust valve rocker arm; and

at least one intake valve, valve seat, valve guide, valve stem seal, valve spring, valve spring retainer and intake valve rocker arm.

Serial No.: 09/981,338
Art Unit: 3747
Examiner: HARRIS, Katrina B.
Page 6 of 31

11. (Original) An engine from a modular family of internal combustion engines as in claim 10, wherein the top end component package further comprises:

- a piston pin;
- a small end rod bearing;
- a big end rod bearing;
- a set of piston rings;
- a pair of connecting rod bolts;
- a cam chain tensioner;
- an exhaust valve hydraulic tappet for each exhaust valve; and
- an intake valve hydraulic tappet for each intake valve.

12. (Original) An engine from a modular family of internal combustion engines as in claim 11, wherein the top end component package further comprises:

- a piston; and
- a connecting rod.

Serial No.: 09/961,338
Art Unit: 3747
Examiner: HARRIS, Katrina B.
Page 7 of 31

13. **(Original)** An engine from a modular family of internal combustion engines as in claim 12, wherein the top end component package further comprises:

a cylinder head; and

a camshaft.

14. **(Original)** An engine from a modular family of internal combustion engines as in claim 13, wherein the top end component package further comprises:

at least one rocker arm shaft.

15. **(Previously Presented)** An engine from a modular family of internal combustion engines as in claim 9, wherein the first engine has a cylinder configuration of one of a single cylinder and a V-twin, and wherein the second engine has a cylinder configuration of one of an inline twin and an inline three.

16. **(Previously Presented)** An engine from a modular family of internal combustion engines as in claim 9, wherein the first engine has a cylinder configuration of one of a V-six and a V-four and wherein the second engine has an inline four cylinder configuration.

17. **(Previously Presented)** A method for manufacturing a modular family of internal combustion engines, comprising:

Serial No.: 09/961,338
Art Unit: 3747
Examiner: HARRIS, Katrina B.
Page 8 of 31

designing a single top end component package; and

designing a family of internal combustion engines, the family including at least three engines, each with a different configuration selected from a group comprising a single cylinder, V-type, inline, opposed, square, w-type and radial;

designing a first engine of the at least three engines having a cylinder configuration of one of a single cylinder, V-type, W-type, opposed and radial engine;

designing a second engine of the at least three engines having a cylinder configuration of one of an inline and a square engine;

wherein each cylinder of each engine of the family uses the same top end component package designed in the first step; and

wherein two of the at least three engines, with different configurations, are each constructed and arranged to power a different recreational vehicle selected from a group comprising snowmobiles, all terrain vehicles, go carts, personal watercraft, boats with outboard motors, boats with inboard engines, motorcycles, scooters, and light aircrafts.

18. (Original) A method for manufacturing a modular family of internal combustion engines as in claim 17, wherein all of the engines of the family are overhead valve, four-stroke engines and the step for designing the top end component package includes designing the following components of the top end package:

at least one exhaust valve, valve seat, valve guide, valve stem seal, valve spring, valve spring retainer and exhaust valve rocker arm; and

Serial No.: 09/861,338
Art Unit: 3747
Examiner: HARRIS, Katrina B.
Page 9 of 31

at least one intake valve, valve seat, valve guide, valve stem seal, valve spring, valve spring retainer and intake valve rocker arm.

19. (Original) A method for manufacturing a modular family of internal combustion engines as in claim 18, wherein the step for designing the top end component package includes designing the further following components of the top end package:

- a piston pin;
- a small end rod bearing;
- a big end rod bearing;
- a set of piston rings;
- a pair of connecting rod bolts;
- a cam chain tensioner;
- an exhaust valve hydraulic tappet for each exhaust valve; and
- an intake valve hydraulic tappet for each intake valve.

20. (Original) A method for manufacturing a modular family of internal combustion engines as in claim 19, wherein the step for designing the top end component package includes designing the further following components of the top end package:

- a piston; and
- a connecting rod.

Serial No.: 09/961,338
Art Unit: 3747
Examiner: HARRIS, Katrina B.
Page 10 of 31

21. (Original) A method for manufacturing a modular family of internal combustion engines as in claim 20, wherein the step for designing the top end component package includes designing the further following components of the top end package:

a cylinder head; and

a camshaft.

22. (Original) A method for manufacturing a modular family of internal combustion engines as in claim 21, wherein the step for designing the top end component package includes designing:

at least one rocker arm shaft.

23. (Currently Amended) A method for manufacturing a modular family of internal combustion engines as in claim 17, wherein the first engine is designed to have a V-twin cylinder configuration ~~and~~ and wherein the second engine is designed to have a cylinder configuration of one of an inline twin and an inline three engine.

24. (Previously Presented) A method for manufacturing a modular family of internal combustion engines as in claim 17, wherein the first engine is designed so as to have a cylinder configuration of one of a V-six and a V-four engine and wherein the second engine is designed to have an inline four cylinder configuration.

Serial No.: 09/961,338
Art Unit: 3747
Examiner: HARRIS, Katrina B.
Page 11 of 31

25. (Previously Presented) A method for reducing a number of unique components required for manufacturing a modular family of internal combustion engines, comprising:

designing a single top end component package;

designing a family of internal combustion engines, the family including at least three engines, each with a different configuration selected from a group comprising single cylinder, V-type, inline, opposed, square, w-type and radial;

designing a first engine of the at least three engines having a cylinder configuration of one of a single cylinder, V-type, W-type, opposed, and radial engine;

designing a second engine of the at least three engines having a cylinder configuration of one of an inline and a square engine;

wherein, each cylinder of each engine of the family uses the same top end component package designed in the first step and each component in the top end component package is designed to comply with the strictest performance requirement for that component in any application utilizing one of the family of engines; and

wherein two of the at least three engines, with different configurations, are each constructed and arranged to power a different recreational vehicle selected from a group comprising snowmobiles, all terrain vehicles, go carts, personal watercraft, boats with outboard motors, boats with inboard engines, motorcycles, scooters, and light aircraft.

Serial No.: 09/961,338
Art Unit: 3747
Examiner: HARRIS, Katrina B.
Page 12 of 31

26. **(Original)** A method as in claim 25, wherein all of the engines of the family are overhead valve, four-stroke engines and the step for designing the top end component package includes designing the following components of the top end package:

at least one exhaust valve, valve seat, valve guide, valve stem seal, valve spring, valve spring retainer and exhaust valve rocker arm; and

at least one intake valve, valve seat, valve guide, valve stem seal, valve spring, valve spring retainer and intake valve rocker arm.

27. **(Original)** A method as in claim 26, wherein the step for designing the top end component package includes designing the further following components of the top end package:

a piston pin;

a small end rod bearing;

a big end rod bearing;

a set of piston rings;

a pair of connecting rod bolts;

a cam chain tensioner;

an exhaust valve hydraulic tappet for each exhaust valve; and

an intake valve hydraulic tappet for each intake valve.

Serial No.: 09/961,338
Art Unit: 3747
Examiner: HARRIS, Katrina B.
Page 13 of 31

28. **(Original)** A method as in claim 27, wherein the step for designing the top end component package includes designing the further following components of the top end package:

a piston; and

a connecting rod.

29. **(Original)** A method as in claim 28, wherein the step for designing the top end component package includes designing the further following components of the top end package:

a cylinder head; and

a camshaft.

30. **(Original)** A method as in claim 29, wherein the step for designing the top end component package includes designing:

at least one rocker arm shaft.

31. **(Previously Presented)** A method as in claim 25, wherein the first engine is designed to have a V-twin cylinder configuration and wherein the second engine is designed to have one of an inline twin and an inline three cylinder configuration.

Serial No.: 09/961,338
Art Unit: 3747
Examiner: HARRIS, Katrina B.
Page 14 of 31

32. **(Previously Presented)** A method as in claim 25, wherein the first engine is designed to have one of a V-six and a V-four cylinder configuration and wherein the second engine is designed to have an inline four cylinder configuration.

33. **(Previously Presented)** One from a family of recreational vehicles incorporating one from a modular family of internal combustion engines, wherein:

the family of engines includes at least two engines

a first engine of the at least two engines having a cylinder configuration of one of a single cylinder, V-type, opposed, w-type and radial engine;

a second engine of the at least two engines having a cylinder configuration of one of an inline and square engine;

each of the first and the second engine including at least one cylinder, each cylinder of each engine of the family using identical top end component packages;

the family of recreational vehicles encompasses at least two different recreational vehicles selected from a group comprising snowmobiles, all terrain vehicles, go carts, personal watercraft, boats with outboard motors, boats with inboard engines, motorcycles, scooters, and light aircraft; and

the first and the second engine are each constructed and arranged to power one of the at least two different recreational vehicles.

Serial No.: 09/961,338
Art Unit: 3747
Examiner: HARRIS, Katrina B.
Page 15 of 31

34. **(Original)** One from a family of recreational vehicles as in claim 33, wherein the engines are all overhead valve, four-stroke engines and the top end component package comprises:

at least one exhaust valve, valve seat, valve guide, valve stem seal, valve spring, valve spring retainer and exhaust valve rocker arm; and

at least one intake valve, valve seat, valve guide, valve stem seal, valve spring, valve spring retainer and intake valve rocker arm.

35. **(Orginal)** One from a family of recreational vehicles as in claim 34, wherein the top end component package further comprises:

a piston pin;

a small end rod bearing;

a big end rod bearing;

a set of piston rings;

a pair of connecting rod bolts;

a cam chain tensioner;

an exhaust valve hydraulic tappet for each exhaust valve; and

an intake valve hydraulic tappet for each intake valve.

36. **(Original)** One from a family of recreational vehicles as in claim 35, wherein the top end component package further comprises:

Serial No.: 09/961,338
Art Unit: 3747
Examiner: HARRIS, Katrina B.
Page 16 of 31

a piston; and
a connecting rod.

37. **(Original)** One from a family of recreational vehicles as in claim 36, wherein the top end component package further comprises:

a cylinder head; and
a camshaft.

38. **(Original)** One from a family of recreational vehicles as in claim 37, wherein the top end component package further comprises:

at least one rocker arm shaft.

39. **(Previously Presented)** One from a family of recreational vehicles as in claim 33, wherein the first engine has a cylinder configuration of one of a single cylinder and a V-twin engine and wherein the second engine has a cylinder configuration of one of an inline twin and an inline three engine.

40. **(Previously Presented)** One from a family of recreational vehicles as in claim 33, wherein the first engine has a cylinder configuration of one of a V-six and a V-four engine and wherein the second engine has an inline four cylinder configuration.

Serial No.: 09/981,338
Art Unit: 3747
Examiner: HARRIS, Katrina B.
Page 17 of 31

41. **(Previously Presented)** A family of recreational vehicles sharing a modular family of internal combustion engines, wherein:

the family of engines includes at least two engines

a first engine of the at least two engines having a configuration of one of a single cylinder, V-type, opposed, w-type and radial;

a second engine of the at least two engines having one of an inline and a square cylinder configuration;

each of the first and the second engine including at least one cylinder, each cylinder of each engine of the family using identical top end component packages;

the family of recreational vehicles encompasses at least two different recreational vehicles selected from a group comprising snowmobiles, all terrain vehicles, go carts, personal watercraft, boats with outboard motors, boats with inboard engines, motorcycles, scooters, and light aircraft; and

the first and the second engine are each constructed and arranged to power one of the at least two different recreational vehicles.

42. **(Original)** A family of recreational vehicles as in claim 41, wherein the engines are all overhead valve, four-stroke engines and the top end component package comprises:

at least one exhaust valve, valve seat, valve guide, valve stem seal, valve spring, valve spring retainer and exhaust valve rocker arm; and

at least one intake valve, valve seat, valve guide, valve stem seal, valve spring, valve spring retainer and intake valve rocker arm.

Serial No.: 09/961,338
Art Unit: 3747
Examiner: HARRIS, Katrina B.
Page 18 of 31

43. (Original) A family of recreational vehicles as in claim 42, wherein the top end component package further comprises:

- a piston pin;
- a small end rod bearing;
- a big end rod bearing;
- a set of piston rings;
- a pair of connecting rod bolts;
- a cam chain tensioner;
- an exhaust valve hydraulic tappet for each exhaust valve; and
- an intake valve hydraulic tappet for each intake valve.

44. (Original) A family of recreational vehicles as in claim 43, wherein the top end component package further comprises:

- a piston; and
- a connecting rod.

45. (Original) A family of recreational vehicles as in claim 44, wherein the top end component package further comprises:

- a cylinder head; and
- a camshaft.

Serial No.: 09/961,338
Art Unit: 3747
Examiner: HARRIS, Katrina B.
Page 19 of 31

46. **(Original)** A family of recreational vehicles as in claim 45, wherein the top end component package further comprises:

at least one rocker arm shaft.

47. **(Previously Presented)** A family of recreational vehicles as in claim 41, wherein the first engine has a cylinder configuration of one of a single cylinder and a V-twin engine and wherein the second engine has a cylinder configuration of one of an inline twin and an inline three engine.

48. **(Previously Presented)** A family of recreational vehicles as in claim 41, wherein the first engine has a cylinder configuration of one of a V-six and a V-four engine and wherein the second engine has an inline four cylinder configuration.

49. **(Previously Presented)** A method for manufacturing one from a family of recreational vehicles sharing a family of internal combustion engines, comprising:

designing a single top end component package; and

designing a first engine having a cylinder configuration of one of a single cylinder, V-type, opposed, w-type and radial;

designing a second engine having one of an inline and square cylinder configuration;

Serial No.: 09/961,338
Art Unit: 3747
Examiner: HARRIS, Katrina B.
Page 20 of 31

the first and the second engine being part of the family of internal combustion engines

wherein each cylinder of both of the first and the second engine of the family uses the same top end component package designed in the first step;

wherein the plurality of recreational vehicle types encompasses at least two from a group comprising snowmobiles, all terrain vehicles, go carts, personal watercraft, boats with outboard motors, boats with inboard engines, motorcycles, scooters, and light aircraft; and

the first and the second engine are each constructed and arranged to power one of the at least two different recreational vehicle types from the plurality of recreational vehicle types.

50. (Original) A method for manufacturing one from a family of recreational vehicles as in claim 49, wherein all of the engines of the family are overhead valve, four-stroke engines and the step for designing the top end component package includes designing the following components of the top end package:

at least one exhaust valve, valve seat, valve guide, valve stem seal, valve spring, valve spring retainer and exhaust valve rocker arm; and

at least one intake valve, valve seat, valve guide, valve stem seal, valve spring, valve spring retainer and intake valve rocker arm.

51. (Original) A method for manufacturing one from a family of recreational vehicles as in claim 50, wherein the step for designing the top end

Serial No.: 09/961,338
Art Unit: 3747
Examiner: HARRIS, Katrina B.
Page 21 of 31

component package includes designing the further following components of the top end package:

- a piston pin;**
- a small end rod bearing;**
- a big end rod bearing;**
- a set of piston rings;**
- a pair of connecting rod bolts;**
- a cam chain tensioner;**
- an exhaust valve hydraulic tappet for each exhaust valve; and**
- an intake valve hydraulic tappet for each intake valve.**

52. **(Original)** A method for manufacturing one from a family of recreational vehicles as in claim 51, wherein the step for designing the top end component package includes designing the further following components of the top end package:

- a piston; and**
- a connecting rod.**

53. **(Original)** A method for manufacturing one from a family of recreational vehicles as in claim 52, wherein the step for designing the top end component package includes designing the further following components of the top end package:

Serial No.: 09/961,338
Art Unit: 3747
Examiner: HARRIS, Katrina B.
Page 22 of 31

a cylinder head; and

a camshaft.

54. **(Original)** A method for manufacturing one from a family of recreational vehicles as in claim 53, wherein the step for designing the top end component package includes designing:

at least one rocker arm shaft.

55. **(Previously Presented)** A method for manufacturing one from a family of recreational vehicles as in claim 49, wherein the first engine is designed to have a V-twin cylinder configuration and wherein the second engine is designed to have one of an inline twin and an inline three cylinder configuration.

56. **(Previously Presented)** A method for manufacturing one from a family of recreational vehicles as in claim 49, wherein the first engine is designed to have one of a V-six and a V-four cylinder configuration and wherein the second engine is designed to have an inline four cylinder configuration.

57. **(Currently Amended)** A method for manufacturing a family of recreational vehicles sharing a family of internal combustion engines, comprising:

designing a single top end component package; and

designing a first engine having a cylinder configuration of one of a single cylinder, V-type, opposed, w-type and radial;

Serial No.: 09/961,338
Art Unit: 3747
Examiner: HARRIS, Katrina B.
Page 23 of 31

designing a second engine having one of an inline and a square cylinder configuration;

the first and the second engine being part of the family of internal combustion engines;

wherein each cylinder of the first and the second engine of the family uses the same top end component package designed in the first step;

wherein the plurality of recreational vehicle types encompasses at least two from a group comprising snowmobiles, all terrain vehicles, go carts, personal watercraft, boats with outboard motors, boats with inboard engines, motorcycles, scooters, and light aircraft; and

the first and the second engines, with different configurations, are each constructed and arranged to power one of the at least two different recreational vehicle types from the plurality of recreational vehicle types.

58. (Original) A method for manufacturing a family of recreational vehicles as in claim 57, wherein all of the engines of the family are overhead valve, four-stroke engines and the step for designing the top end component package includes designing the following components of the top end package:

at least one exhaust valve, valve seat, valve guide, valve stem seal, valve spring, valve spring retainer and exhaust valve rocker arm; and

at least one intake valve, valve seat, valve guide, valve stem seal, valve spring, valve spring retainer and intake valve rocker arm.

Serial No.: 09/961,338
Art Unit: 3747
Examiner: HARRIS, Katrina B.
Page 24 of 31

59. (Original) A method for manufacturing a family of recreational vehicles as in claim 58, wherein the step for designing the top end component package includes designing the further following components of the top end package:

- a piston pin;
- a small end rod bearing;
- a big end rod bearing;
- a set of piston rings;
- a pair of connecting rod bolts;
- a cam chain tensioner;
- an exhaust valve hydraulic tappet for each exhaust valve; and
- an intake valve hydraulic tappet for each intake valve.

60. (Original) A method for manufacturing a family of recreational vehicles as in claim 59, wherein the step for designing the top end component package includes designing the further following components of the top end package:

- a piston; and
- a connecting rod.

61. (Original) A method for manufacturing a family of recreational vehicles as in claim 60, wherein the step for designing the top end component

Serial No.: 09/961,338
Art Unit: 3747
Examiner: HARRIS, Katrina B.
Page 25 of 31

package includes designing the further following components of the top end package:

a cylinder head; and

a camshaft.

62. **(Original)** A method for manufacturing a family of recreational vehicles as in claim 61, wherein the step for designing the top end component package includes designing:

at least one rocker arm shaft.

63. **(Currently Amended)** A method for manufacturing a family of recreational vehicles as in claim 57, wherein the first engine is designed to have a V-twin cylinder configuration and wherein the second engine ~~is~~is designed to have one of an inline twin and an inline three cylinder configuration.

64. **(Previously Presented)** A method for manufacturing a family of recreational vehicles as in claim 57, wherein the first engine is designed to have one of a V-six and a V-four cylinder configuration and wherein the second engine is designed to have an inline four cylinder configuration.

65. **(Previously Presented)** A method for reducing a number of unique components required for manufacturing a family of recreational vehicles sharing a family of internal combustion engines, comprising:

Serial No.: 09/961,338
Art Unit: 3747
Examiner: HARRIS, Katrina B.
Page 26 of 31

designing a single top end component package; and

designing a first engine having a configuration of one of a single cylinder, V-type, opposed, square, w-type and radial;

designing a second engine having an inline cylinder configuration;

the first and the second engine being part of the family of internal combustion engines;

wherein each cylinder of the first and the second engine of the family uses the same top end component package designed in the first step and each component in the top end component package is designed to comply with the strictest performance requirement for that component in any application utilizing one of the family of engines;

wherein the plurality of recreational vehicle types encompasses at least two from a group comprising snowmobiles, all terrain vehicles, go carts, personal watercraft, boats with outboard motors, boats with inboard engines, motorcycles, scooters, and light aircraft; and

wherein the first and the second engine are each constructed and arranged to power one of the at least two different recreational vehicle types from the plurality of recreational vehicle types.

66. (Original) A method as in claim 65, wherein all of the engines of the family are overhead valve, four-stroke engines and the step for designing the top end component package includes designing the following components of the top end package:

at least one exhaust valve, valve seat, valve guide, valve stem seal, valve spring, valve spring retainer and exhaust valve rocker arm; and

Serial No.: 09/981,338
Art Unit: 3747
Examiner: HARRIS, Katrina B.
Page 27 of 31

at least one intake valve, valve seat, valve guide, valve stem seal, valve spring, valve spring retainer and intake valve rocker arm.

67. (Original) A method as in claim 66, wherein the step for designing the top end component package includes designing the further following components of the top end package:

- a piston pin;
- a small end rod bearing;
- a big end rod bearing;
- a set of piston rings;
- a pair of connecting rod bolts;
- a cam chain tensioner;
- an exhaust valve hydraulic tappet for each exhaust valve; and
- an intake valve hydraulic tappet for each intake valve.

68. (Original) A method as in claim 67, wherein the step for designing the top end component package includes designing the further following components of the top end package:

- a piston; and
- a connecting rod.

Serial No.: 09/961,338
Art Unit: 3747
Examiner: HARRIS, Katrina B.
Page 28 of 31

69. **(Original)** A method as in claim 68, wherein the step for designing the top end component package includes designing the further following components of the top end package:

a cylinder head; and

a camshaft.

70. **(Original)** A method as in claim 69, wherein the step for designing the top end component package includes designing:

at least one rocker arm shaft.

71. **(Previously Presented)** A method as in claim 65, wherein the first engine is designed to have a V-twin cylinder configuration and wherein the second engine is designed to have a cylinder configuration of one of an inline twin and an inline three engine.

72. **(Previously Presented)** A method as in claim 65, wherein the first engine is designed to have one of a V-six and a V-four cylinder configuration and wherein the second engine is designed to have an inline four cylinder configuration.

73. **(Previously Presented)** The modular family of internal combustion engines as in claim 1, wherein the second engine includes at least two cylinders and a cylinder head, the cylinder head being shared by the at least two cylinders.

Serial No.: 09/981,338
Art Unit: 3747
Examiner: HARRIS, Katrina B.
Page 29 of 31

74. **(Currently Amended)** The modular family of internal combustion engines as in claim 1, wherein the second engine includes a first and a second cylinder, the first cylinder having a first valve and the cylinder having a second valve, each of the first and the second valve being one of an intake and an exhaust valve, the second engine further including ~~second~~ and a camshaft, the camshaft being shared by the first and the second cylinder ~~at least two cylinders~~.